

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 11

	Complete if Known
Application Number	10/601,132
Filing Date	June 20, 2003
First Named Inventor	Anthony P. Shuber
Art Unit	1642
Examiner Name	S. E. Aeder
Attorney Docket Number	EXT-055

	-		U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
		US-2001/039012	11-08-2001	Lapidus	· · · · · · · · · · · · · · · · · · ·			
	A1* A2*	US-2001/039012	08-30-2001	Shuber et al.				
	A3*	US-2007/018180	01-03-2002					
	A4*	US-2002/001800 US-2002/004201	01-03-2002					
w	A5*	US-2002/004201	02-28-2002	Shuber				
	A6*	US-2002/025525 US-2002/045183	04-18-2002					
	A7*	US-2002/048752		Lapidus et al.				
	A8*	US-2002/046752	05-30-2002					
	A9*	US-2002/004787	08-15-2002					
		US-2002/110810 US-2002/119469	08-29-2002	Shuber et al.				
		US-2002/119409	08-29-2002					
		US-2002/119472 US-2002/123052	09-05-2002					
		US-2002/132251	09-03-2002					
			11-07-2002					
		US-2002/164631						
		US-2003/044780	03-06-2003					
		US-2003/049659	03-13-2003					
	1	US-2003/087258	05-08-2003	Shuber				
		US-2004/043467	03-04-2004	Shuber et al.				
		US-2005/260638	11-24-2005					
		US-2006/121495	06-08-2006					
		US-2007/0202513	08-30-2007	Shuber				
		US-2007/0248546	10-25-2007	Shuber				
		US-3,413,464	11-26-1968					
		US-4,101,279	07-18-1978					
		US-4,309,782	01-12-1982					
		US-4,333,734	06-08-1982					
		US-4,358,535	11-09-1982					
		US-4,445,235	05-01-1984					
		US-4,535,058	08-13-1985					
		US-4,578,358	03-25-1986	Oksman et al.				
		US-4,705,050	11-10-1987	Markham				
		US-4,735,905	04-05-1988	Parker				
		US-4,786,718	11-22-1988	Weinberg et al.				
		US-4,857,300	08-15-1989	Maksem				
		US-4,871,838	10-03-1989	Bos et al.				
		US-4,935,342	06-19-1990	Seligson et al.				
		US-4,981,783	01-01-1991	Augenlicht				
		US-4,982,615	01-08-1991	Sultan et al.				
		US-5,087,617	02-11-1992					
		US-5,126,239	06-30-1992					
		US-5,137,806		LeMaistre et al.				
		US-5,149,506	09-22-1992					
	A43*	US-5,196,167	03-23-1993	Guadagno et al.				

Examiner	Date	
Signature	Considered	

Complete if Known Substitute for form 1449/PTO 10/601,132 Application Number INFORMATION DISCLOSURE June 20, 2003 Filing Date STATEMENT BY APPLICANT Anthony P. Shuber First Named Inventor 1642 Art Unit (Use as many sheets as necessary) S. E. Aeder Examiner Name EXT-055 Sheet 2 11 Attorney Docket Number of

	U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	A44*	US-5,200,314	04-06-1993	Urdea			
	A45*	US-5,248,671	09-28-1993	Smith			
******	A46*	US-5,272,057	12-21-1993	Smulson et al.			
		US-5,302,509	04-12-1994	Cheeseman			
		US-5,330,892	07-19-1994	Vogelstein et al.			
-		US-5,331,973	07-26-1994	Fiedler et al.			
	A50*	US-5,348,855	09-20-1994	Dattagupta et al.			
	A51*	US-5,352,775	10-04-1994	Albertsen et al.			
		US-5,362,623	11-08-1994	Vogelstein et al.			
		US-5,369,004	11-29-1994	Polymeropoulos et al.			
		US-5,378,602	01-03-1995				
		US-5,380,645	01-10-1995	Vogelstein			
	A56*	US-5,380,647	01-10-1995	Bahar et al.			
		US-5,382,510	01-17-1995	Levine et al.			
		US-5,409,586	04-25-1995	Kamahori et al.			
		US-5,416,025	05-16-1995	Krepinsky et al.			
		US-5,458,761	10-17-1995				
		US-5,463,782	11-07-1995	Carlson et al.			
		US-5,466,576	11-14-1995	Schulz et al.			
	A63*	US-5,468,610	11-21-1995	Polymeropoulos et al.			
		US-5,468,613	11-21-1995	Erlich et al.			
		US-5,482,834	01-09-1996	Gillespie			
	A66*	US-5,489,508	02-06-1996	West et al.			
		US-5,492,808	02-20-1996	de la Chapelle et al.			
	A68*	US-5,496,470	03-05-1996				
·		US-5,506,105	04-09-1996	Haydock			
		US-5,508,164	04-16-1996	Kausch et al.			
		US-5,512,441	04-30-1996	Ronai			
		US-5,514,547	05-07-1996	Balazs et al.			
		US-5,527,676	06-18-1996				
		US-5,532,108	07-02-1996				
		US-5,538,851	07-23-1996				
		US-5,559,014	09-24-1996	Estes et al.			
		US-5,580,729	12-03-1996	Vogelstein			
		US-5,589,335		Kearney et al.			
		US-5,599,662	02-04-1997	Respess			
		US-5,612,473	03-18-1997	Wu et al.			
		US-5,635,352	06-03-1997	Urdea et al.			
		US-5,641,628	06-24-1997				
		US-5,645,995	07-08-1997				
		US-5,670,325		Lapidus et al.			

Examiner	Date	
Signature	Considered	

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 3 of 11

Complete if Known				
Application Number	10/601,132			
Filing Date	June 20, 2003			
First Named Inventor	Anthony P. Shuber			
Art Unit	1642			
Examiner Name	S. E. Aeder			
Attorney Docket Number	EXT-055			

	U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	A85*	US-5,688,643	11-18-1997	Oka et al.			
-	A86*	US-5,709,998	01-20-1998	Kinzler et al.			
	A87*	US-5,710,028	01-20-1998	Eyal et al.			
	A88*	US-5,741,650	04-21-1998	Lapidus et al.			
	A89*	US-5,759,777	06-02-1998	Kearney et al.			
-	A90*	US-5,830,665	11-03-1998				
	A91*	US-5,846,710	12-08-1998	Bajaj			
	A92*	US-5,856,104	01-05-1999	Chee et al.			
	A93*	US-5,882,865	03-16-1999	Vogelstein et al.			
	A94*	US-5,888,778	03-30-1999				
	A95*	US-5,910,407	06-08-1999				
	A96*	US-5,916,744	06-29-1999				
	A97*	US-5,928,870	07-27-1999	Lapidus et al.			
	A98*	US-5,942,396	08-24-1999	Shiff et al.			
	A99*	US-5,952,178	09-14-1999	Lapidus et al.			
		US-5,976,800	11-02-1999	Lau et al.			
		US-6,020,137	02-01-2000	Lapidus et al.			
		US-6,037,465		Hillebrand et al.			
		US-6,084,091	07-04-2000	Muller et al.			
		US-6,100,029		Lapidus et al.			
		US-6,143,529		Lapidus et al.			
		US-6,146,828		Lapidus et al.			
		US-6,150,100		Ruschoff et al.			
		US-6,156,504	12-05-2000				
		US-6,177,251	01-23-2001	Vogelstein et al.			
		US-6,214,187		Hammond et al.			
		US-6,214,558	04-10-2001	Shuber et al.			
		US-6,228,596	05-08-2001	Macina et al.			
		US-6,235,474		Feinberg			
		US-6,238,927	05-29-2001	Abrams et al.			
		US-6,251,660	06-26-2001	Muir et al.	,		
		US-6,268,136	07-31-2001	Shuber et al.			
		US-6,280,947	08-28-2001	Shuber et al.			
		US-6,300,077	10-09-2001	Shuber et al.			
		US-6,303,304	10-16-2001	Shuber et al.			
		US-6,406,857	06-18-2002	Shuber et al.			
		US-6,428,964	08-06-2002	Shuber			
		US-6,448,002	09-10-2002	Hillebrand et al.			
		US-6,498,012	12-24-2002				
		US-6,503,718	01-07-2003				
	A125*	US-6,551,777	04-22-2003				

Examiner Date	
Signature Considered	

Sut	estitute for form 1449/PTO			Complete if Known		
				Application Number	10/601,132	
11	NFORMATIO	N DI	SCLOSURE	Filing Date	June 20, 2003	
l s	TATEMENT	BY A	APPLICANT	First Named Inventor	Anthony P. Shuber	
	.,			Art Unit	1642	
	(Use as many si	ieets as	s necessary)	Examiner Name	S. E. Aeder	
Sheet	4	of	11	Attorney Docket Number	EXT-055	

	U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	A126*	US-6,586,177	07-01-2003	Shuber			
	A127*	US-6,849,403	02-01-2005	Shuber			
	A128*	US-6,919,174	07-19-2005	Shuber			
	A129*	US-6,964,846	11-15-2005	Shuber			
	A130*	US-6,203,993 B1	03-20-2001	Shuber et al.	,		
	A131*	US-6,351,857 B2	03-05-2002	Slaon, III et al.			
	A132*	US-6,415,455 B1	07-09-2002	Slaon, III et al.			
	A133*	US-6,428,964 B1	08-06-2002	Shuber			
	A134*	US-6,475,738 B2	11-05-2002	Shuber et al.			
	A135*	US-6,482,595 B2	11-19-2002	Shuber et al.			

		FOREIG	GN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code³-Number⁴-Kind Code⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	
	B1	AU-19942333	09-30-1999			
	B2	AU-A-11325/95	04-18-1996	Univ Johns Hopkins		
	В3	CA-2228769	02-27-1997	Max Planck Gesellschaft		
	B4	DE-19530132 C2	02-20-1997	Max Planck Gesellschaft		1
	B5	DE-19712332 A1	10-01-1998	Boehringer Mannheim Gmbh		V
	B6	DE-19736691 A	02-25-1999	Giesing Michael Prof Dr Med		
	В7	EP-0270017 A2	06-08-1988	Molecular Biosystems Inc		
	В8	EP-0284362 A2	09-28-1988	Ici Plc		
	В9	EP-0337498	10-18-1989	Montefiore Med Center		
	B10	EP-0390323 A2	10-03-1990	Univ Johns Hopkins		
	B11	EP-0391565	10-10-1990	Helena Lab Corp		
	B12	EP-0407789 B1	01-16-1991	Canon Kk		
	B13	EP-0664339 A1	07-26-1995	Wakunaga Seiyaku Kk		
	B14	GB-2327497	01-27-1999	Zeneca Ltd.		
	B15	WO-00/09751	02-24-2000	Exact Lab Inc		
	B16	WO-00/11215	03-02-2000	Exact Lab Inc		
	B17	WO-00/31298-`	06-02-2000	Exact Lab Inc		
	B18	WO-00/31303	06-02-2000	Exact Lab Inc		
	B19	WO-00/31305	06-02-2000	Exact Lab Inc		
	B20	WO-00/32820	06-08-2000	Exact Lab Inc		
	B21	WO-00/50640	08-31-2000	Exact Lab Inc		
	B22	WO-00/58514	10-05-2000	Exact Lab Inc		
	B23	WO-00/60118	10-12-2000	Mosaic Technologies Inc et al.		

Examiner Date Signature Considered	
Considered	
Signature	

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

First Named

(Use as many sheets as necessary)

Sheet 5 of 11

	Complete if Known
Application Number	10/601,132
Filing Date	June 20, 2003
First Named Inventor	Anthony P. Shuber
Art Unit	1642
Examiner Name	S. E. Aeder
Attorney Docket Number	EXT-055

		FOR	EIGN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
	B24	WO-00/70096	11-23-2000	Exact Lab Inc		
	B25	WO-01/11083 A2	02-15-2001	Exact Lab Inc		М
	B26	WO-01/18252 A2	03-15-2001	Exact Lab Inc		
	B27	WO-01/42502 A2	06-14-2001	Exact Lab Inc		
	B28	WO-01/42503 A2	06-14-2001	Exact Sciences Corp		
	B29	WO-01/42781 A2	06-14-2001	Exact Sciences Corp et al.		
	B30	WO-01/64950 A2	09-07-2001	Exact Sciences Corp		
	B31	WO-02/55740 A2	07-18-2002	Exact Sciences Corp		
	B32	WO-02/74995	09-26-2002	Exact Sciences Corp et al.		
	B33	WO/02/092858 A2	11-21-2002	Exact Sciences Corp		
	B34	WO-03/71252 A2	08-28-2003	Exact Sciences Corp		
	B35	WO-90/09455	08-23-1990	Geneco Pty Ltd		
	B36	WO-92/13103	08-06-1992	Univ Johns Hopkins et al.		
	B37	WO-92/16657	10-01-1992	Du Pont		
	B38	WO-93/18186	09-16-1993	Univ California		
	B39	WO-93/20233	10-14-1993	Univ Maryland		
	B40	WO-93/20235	10-14-1993	Univ Johns Hopkins Med		
	B41	WO-94/00603	01-06-1994	Univ Princeton et al.		
	B42	WO-94/01447	01-20-1994	Eriphyle B V et al.		
	B43	WO-94/10575	05-11-1994	Rycus Avigail et al.		
	B44	WO-94/11383	05-26-1994	Cold Spring Harbor Lab		
	B45	WO-95/00669 A	01-05-1995	Pharmacia Biotech Ab et al.		
	B46	WO-95/07361	03-16-1995	Pasteur Institut et al.		П
	B47	WO-95/09928	04-13-1995	Univ California		
	B48	WO-95/09929	04-13-1995	Univ California		
	B49	WO-95/13397	05-18-1995	Univ Johns Hopkins Med		
	B50	WO-95/15400	06-08-1995	Univ Johns Hopkins		
	B51	WO-95/16792	06-22-1995	Stroun Maurice et al.		
	B52	WO-95/18818	07-13-1995	Philadelphia Children Hospital		П
	B53	WO-95/19448	07-20-1995	Univ Johns Hopkins Med		П
	B54	WO-95/25813	09-28-1995	Univ Utah Res Found et al.		
	B55	WO-96/01907	01-25-1996	Squibb Bristol Myers Co	*	
	B56	WO-96/06951	03-07-1996	Univ Johns Hopkins Med et al.		
	B57	WO-96/08514	03-21-1996	Tsang Kwong Y et al.		
	B58	WO-97/07239	02-27-1997	Max Planck Gesellschaft et al.		1
-	B59	WO-97/09600	03-13-1997	Medical Res Council et al.		П
	B60	WO-97/19191 A	05-29-1997	Oegreid Dagfinn et al.		
	B61	WO-97/23651	07-03-1997	Exact Lab Inc		П

Examiner Date	e
Signature Con.	nsidered

Sub	Substitute for form 1449/PTO			Complete if Known			
				Application Number	10/601,132		
11	NFORMATIO	N DIS	SCLOSURE	Filing Date	June 20, 2003		
s	TATEMENT	BY A	PPLICANT	First Named Inventor	Anthony P. Shuber		
				Art Unit	1642		
	(Use as many s	heets as	necessary)	Examiner Name	S. E. Aeder		
Sheet	6	of	11	Attorney Docket Number	EXT-055		

		FOREI	GN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	Т ⁶
	B62	WO-97/28450	08-07-1997	Exact Lab Inc		
	B63	WO-98/08971	03-05-1998	Invitek Gmbh et al.		V
	B64	WO-98/38338	09-03-1998	Exact Lab Inc		
	B65	WO-98/39478	09-11-1998	Exact Lab Inc		
	B66	WO-98/58081	12-23-1998	Exact Lab Inc		
	B67	WO-98/58084	12-23-1998	Exact Lab Inc		
	B68	WO-99/07894	02-18-1999	Wisconsin Alumni Res Found et al.		
	B69	WO-99/07895	02-18-1999	Ludwig Inst Cancer Res et al.		
	B70	WO-99/10528	03-04-1999	Giesing Michael et al.		$\sqrt{}$
	B71	WO-99/20798	04-29-1999	Exact Lab Inc		
	B72	WO-99/26724	06-03-1999	Mosaic Technologies et al.		
	B73	WO-99/28507	06-10-1999	Exact Lab Inc		
	B74	WO-99/53316	10-21-1999	Exact Lab Inc		
	B75	WO-99/55912	11-04-1999	Exact Lab Inc		
	B76	WO-99/66077	12-23-1999	Exact Lab Inc		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional).

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²			
	C1	Alquist et al. "Universal Detection of Aerodigestive Cancers by Assay of Nanopoptotic Human DNA in Stool," Presented at Digestive Disesase Week Annual Conference, San Diego, CA, May 2000.				
	C2	Aaltonen et al. (1994) "Replication Errors in Benign and Malignant Tumors from Hereditary Nonpolypopsis Colorectal Cancer Patients" Cancer Research 54: 1645-1648.				
	C3	Aaltonen et al. (1998) "Incidence of Hereditary Nonpolyposis Colorectal Cancer and the Feasibility of Molecular Screening for the Disease" The New England Journal of Medicine 338: 1481-1487.				

Examiner	Di	ate	
Signature	Į Co	onsidered	

²Applicant is to place a check mark here if English language Translation is attached.

Sut	Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Complete if Known			
				Application Number	10/601,132
II.	NFORMATION DISCLOSUR STATEMENT BY APPLICAN (Use as many sheets as necessary)	SCLOSURE	Filing Date	June 20, 2003	
S	STATEMENT BY APPLICANT			First Named Inventor	Anthony P. Shuber
				Art Unit	1642
	(Use as many sh	eets as	necessary)	Examiner Name	S. E. Aeder
Sheet	Sheet 7 of 11			Attorney Docket Number	EXT-055

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T,
	C4	Allen et al. (1997) "Morphological and biochemical characterization and analysis of apoptotis." J Pharm. & Toxicol. Methods, Vol. 37, No. 4, pp. 215-28.	
	C5	Ambrosini et al. "A navel anti-apoptosis gene, surviving, expressed in cancer and lymphoma" Nature Medicine, Vol. 3, No. 8, pp. 917-921, August 1997.	
	C6	Anker et al. (1999) "Detection of Circulating Tumour DNA in the Blood (plasma/serum) of Cancer Patients," Cancer and Metastasis Reviews, Vol. 18, pp.65-73.	
	C7	Arber et al. (1997) "A K-ras Oncogene Increases Resistance to Sulindac-Induced Apoptosis in Rat Enterocytes," Gastroenterology, Vol. 113, No. 6, pp. 1892-1900.	
	C8	Bernstein et al. "A Bile Acid-induced Apoptosis Assay for Colon-Cancer Risk and Associated Quality Control Studies," Cancer Research, Vol. 59, pp. 2353-2357, 1999.	
	C9	Bertario et al. (1999) "Risk of Colorectal Cancer Following Colonoscopic Polypectomy," Tumori 85: 157-162.	
	C10	Blum (1995) "Colorectal Cancer: Future Population Screening for Early Colorectal Cancer," European Journal of Cancer, Vol. 31A, pp. 1369-1372.	
	C11	Bohm et al. (1977) "Deletion Analysis at the DEL-27, APC and MTS1 Loci in Bladder Cancer: LOH at the DEL-27 Locus on 5p13-12 is a Prognostic Marker of Tumor Progression," Int. J. Cancer (Pred. Oncol.), 74:291-295.	
	C12	Bos et al. (May 28, 1987) "Prevalence of ras Gene Mutations in Human Colorectal Cancers," Nature, Vol. 327, pp. 293-297.	
	C13	Caldas et al. (1994) "Detection of K-ras Mutations in the Stool of Patients with Pancreatic Adenocarcinoma and Pancreatic Ductal Hyperplasia," Cancer Research, Vol. 54, pp. 3568-3573.	
	C14	Capozzi et al. (1999) "Evaluation of the Replication Error Phenotype in Relation to Molecular and Clinicopathological Features in Hereditary and Early Onset Colorectal Cancer," European Journal of Cancer 35: 289-295.	
	C15	Cave et al. (1994) "Reliability of PCR Directly from Stool Samples: Usefulness of an Internal Standard," BioTechniques, Vol. 16, No. 5, pp. 809-810.	
	C16	Cawkwell et al. (1994) "Frequency of allele loss of DCC, p53, RBI, WTI, NF1, NM23 and APC/MCC in colorectal cancer assayed by fluorescent multiplex polymerase chain reaction," B. J. Can., Vol. 70, pp. 813-818.	
	C17	Chapelle (1999) " Testing Tumors for Microsatellite Instability," European Journal of Human Genetics 7: 407-408.	
	C18	Charlesworth et al. (1994) "The Evolutionary Dynamics of Repetitive DNA in Eukaryotes," Nature, Vol. 371, pp. 215-220.	
	C19	Chen et al. (1997) "Microsatellite Instability in Sporadic-Colon-Cancer Patients With and Without Liver Metastases" International Journal of Cancer 74: 470-474.	
	C ₂ 20	Chen et al. (1996), "Detection of Single-Base Mutations by a Competitive Mobility Shift Assay," Analytical Biochemistry, CIS, Academic, Press, Vol. 239, No. 1, pp. 61-69.	
	C21	Coll et al. (1989) "Evaluation of a Rapid Method of Extracting DNA from Stool Samples for Use in Hybridization Assays," Journal of Clinical Microbiology, Vol. 27, No. 10, pp. 2245-2248.	
	C22	Coombs et al. (1996) "A Rapid, Simple, and User-Friendly Method for DNA Extraction from Clinical Stool Samples," ASM 1996 General Meeting, New Orleans, LA.	

Examiner	Date	٦
Signature	Considered	

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known			
				Application Number	10/601,132
11	INFORMATION DISCLOSUF STATEMENT BY APPLICAN (Use as many sheets as necessary)	SCLOSURE	Filing Date	June 20, 2003	
S	TATEMENT	BY A	PPLICANT	First Named Inventor	Anthony P. Shuber
				Art Unit	1642
	(Use as many	sheets as	necessary)	Examiner Name	S. E. Aeder
Sheet	8	of	11	Attorney Docket Number	EXT-055

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C23	Coughlin et al. (1999) "Public Health Perspectives on Testing for Colorectal Cancer Susceptibility Genes" American Journal of Preventive Medicine 16: 99-104.	
	C24	Croitoru et al. "Reduce, Reuse, and Recycle: Shedding Light on Shedding Cells," Gastroenterology, Vol. 105, pp. 1243-1246, October 1993.	
	C25	Cunningham C. and M.G. Dunlop, (1996) "Molecular Genetic Basis of Colorectal Cancer Susceptibility," British Journal of Surgery, Vol. 83, pp. 321-329.	
-	C26	Deng et al. (1996) "Loss of Heterozygosity in Normal Tissue Adjacent to Breast Carcinomas," Science, Vol. 274, pp. 2057-2059.	
-	C27	Dennin (1979) "DNA of Free and Complexed Origin in Human Plasma: Concentration and Length Distribution," Klin. Wochenschr. Vol. 57, pp. 451-456.	
	C28	Depraetere "Eat me- Signals of apoptotic bodies," Nature Cell Biology, Vol. 2, pg. E 104, June 2000.	
	C29	Deuter et al. (1995) "A Method for Preparation of Fecal DNA Suitable for PCR," Nucleic Acids Research, Vol. 23, No. 18, pp. 3800-3801.	
	C30	Dib et al. (1996) "A Comprehensive Genetic Map of the Human Genome Based on 5,264 Microsatellites," Nature Vol. 380, pp. 152-154.	
	C31	Duffy (1995) "Can Molecular Markers Now be Used for Early Diagnosis of Malignancy?" Clin. Chem, Vol. 41, No. 10, pp. 1410-1413.	
	C32	Eads et al. (1999) "CpG island hypermethylation in human colorectal tumors is not associated with DNA methyltransferase overexpression." Cancer Research, Vol. 59, No. 10, pp. 2301-2306.	
	C33	Eguchi et al. (1996) "Mutations of the p53 Gene in the Stool of Patients with Resectable Colorectal Cancer," Cancer Supplement, Vol. 77, No. 8, pp. 1707-1710.	
	C34	Emlen et al. (1984) "Effect of DNA Size and Strandedness on the <i>in vivo</i> Clearance and Organ Localization of DNA," Clin. Exp. Immunol., Vol. 56, pp. 185-192.	
	C35	Fearon (1995) "Molecular Abnormalities in Colon and Rectal Cancer," The Molecular Basis of Cancer, pp. 340-357.	
	C36	Finkel (1999) "Does Cancer Therapy Trigger Cell Suicide?," Science, Vol. 286, pp.2256-2258.	
	C37	Garewal et al. (1996) "Reduced Bile Acid-induced Apoptosis in "Normal," Colorectal Mucosa: A Potential Biological Marker for Cancer Risk" Cancer Research, Vol. 56, pp. 1480-1483.	
	C38	Giacona et al. (1998) "Cell-Free DNA in Human Blood Plasma: Length Measurements in Patients with Pancreatic Cancer and Healthy Controls," Pancreas, Vol. 17, No. 1, pp. 89-97.	
	C39	Grossman et al. (1988), "Colonoscopic Screening of persons With Suspected Risk Factors for Colon Cancer," Gastroenterology 94: 395-400.	
	C40	Gyllensten et al. (1995) "Sequencing of In Vitro Amplified DNA," Recombinant DNA Methodology II, (Wu, ed.), pp. 565-578.	
	C41	Hall et al. "Regulation of cell number in the mammalian gastrointestinal tract: the importance of apoptosis," Journal of Cell Science, Vol. 107, pp. 3569-3577, 1994.	
	C42	Hasegawa et al. (1995) "Detection of K-ras Mutations in DNAs Isolated From Feces of Patients with Colorectal Tumors by Mutant-Allele-Specific Amplification (MASA)," Oncogene, Vol. 10, pp. 1441-1445.	

Examiner	 Date	
Signature	Considered	

Sut	estitute for form 1449/PTO			Complete if Known			
00.	sample for form 7 (for 10			Application Number	10/601,132		
IN	IFORMATION	1 DI	SCLOSURE	Filing Date	June 20, 2003		
S	TATEMENT B	3Y /	APPLICANT	First Named Inventor	Anthony P. Shuber		
				Art Unit	1642		
	(Use as many sh	eets as	s necessary)	Examiner Name	S. E. Aeder		
Sheet	Sheet 9 of 11		Attorney Docket Number	EXT-055			

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C43	Hetts "To Die or Not to Die, An Overview of Apoptosis and Its Role in Disease," JAMA, Vol. 279, No. 4, pp. 300-307, January 28, 1998.	
	C44	Hibi et al. (1998) "Molecular Detection of Genetic Alterations in the Serum of Colorectal Cancer Patients," Cancer Research, Vol. 58, pp. 1405-1407.	
	C45	Hickman et al. (1994), "Apoptosis and cancer chemotherapy," Phil. Trans. R. Soc. Lond., 345:319-325.	
	C46	Hoang et al. (1997) "BAT-26, an Indicator of the Replication Error Phenotype in Colorectal Cancers and Cell Lines" Cancer Research 57: 300-303.	
	C47	Honchel et al. (1995) "Genomic Instability in Neoplasia," Seminars in Cell Biology, Vol. 6, pp. 45-52.	
	C48	lino et al. (1999) "DNA Microsatellite Instability in Hyperplastic Polyps, Serrated Adenomas, and Mixed Polyps: a Mild Mutator Pathway for Colorectal Cancer?" Journal of Clinical Pathology 52: 5-9.	
	C49	Iniesta et al. (1998) "Genetic Abnormalities and Microsatellite Instability in Colorectal Cancer," Cancer Detection and Prevention 22: 383-395.	
	C50	Ishimaru et al. (1995) "Microsatellite Instability in Primary and Metastatic Colorectal Cancers," International Journal of Cancer 64: 153-157.	
	C51	Jarvinen et al. (1995) "Screening Reduces Colorectal Cancer Rate in Families With Hereditary Nonpolyposis Colorectal Cancer," Gastroenterology 108: 1405-1411.	
	C52	Jernvall et al. (1999) "Microsatellite Instability: Impact on Cancer Progression in Proximal and Distal Colorectal Cancers," European Journal of Cancer 35: 197-201.	
	C53	Jessup et al. (1992) "The Biology of Colorectal Carcinoma," Current Problems in Cancer pp. 263-328.	
	C54	Kawakami et al. (2000) "Hypermethylated APC DNA in Plasma and Prognosis of Patients with Colorectal Carcinoma," Int. J. Cancer (Pred. Oncol.) 84:404-409.	
	C55	Kawasaki et al. (1998) "Inhibition of Apoptosis by Surviving Predicts Shorter Survival Rates in Colorectal Cancer," Cancer Research, Vol. 58, pp. 5071-5074.	
	C56	Kim et al. (1998) "Microsatellite Instability in Young Patients With Colorectal Cancer," Pathology International 48: 586-594.	
	C57	Ko et al. (1999) "Genomic Instabillity and Alterations in Apc, Mcc and Dcc in Hong Kong Patients with Colorectal Carcinoma," Int. J. Cancer (Pred. Oncol.), 84:404-409.	
	C58	Konishi et al. (1996) "Molecular Nature of Colon Tumors in Hereditary Nonpolyposis Colon Cancer, Familial Polyposis, and Sporadic Colon Cancer," Gastroenterology 1 11: 307-317.	
	C59	Lamberti et al. (1999) "Microsatellite Instability - a Useful Diagnostic Tool to Select Patients at High Risk for Hereditary Non-Polyposis Colorectal Cancer: A Study in Different Groups of Patients With Colorectal Cancer," Gut 44: 839-843.	
	C60	Lengauer et al. (1998) "Genetic Instabilities in Human Cancers," Nature, Vol. 396, pp. 643-649.	
	C61	Leon et al. (1977) "Free DNA in the Serum of Cancer Patients and the Effect of Therapy," Cancer Research, Vol. 37, pp. 646-650.	

Examiner	Date
Signature	Considered

Sub	estitute for form 1449/PT)	·	Complete if Known			
				Application Number	10/601,132		
IN	NFORMATIC	N DI	SCLOSURE	Filing Date	June 20, 2003		
S	TATEMENT	BY A	APPLICANT	First Named Inventor	Anthony P. Shuber		
				Art Unit	1642		
	(Use as many	sheets as	necessary)	Examiner Name	S. E. Aeder		
Sheet 10 of 11		Attorney Docket Number	EXT-055				

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. ¹	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C62	Lipkin "Biomarkers of Increased Susceptibility to Gastrointestinal Cancer: New Application to Studies of Cancer Prevention in Human Subjects," Cancer Research, Vol. 48, pp. 235-245, January 15, 1998.	
	C63	Lleonart et al. (1998) "Microsatellite Instability and p53 Mutations in Sporadic Right and Left Colon Carcinoma" American Cancer Society 83: 889-895.	
	C64	Loktionov et al. (1995) "Early Detection of Cancer-Associated Gene Alterations in DNA Isolated from Rat Feces During Intestinal Tumor Induction with 1,2-Dimethylhydrazine," International Journal of Oncology, Vol. 6, pp. 437-445.	
	C65	Mulcachy et al. (February 1998) "A Prospective Study of K-ras Mutations in the Plasma of Pancreatic Cancer Patients," Clinical Cancer Research Vol. 4, pp. 271-275.	
	C66	Nollau et al. (1996) "Detection of K-ras Mutations in Stools of Patients with Colorectal Cancer by Mutant-Enriched PCR," Int. J. Cancer, Vol. 66 pp. 332-336.	
	C67	Nollau et al. (May 1996) "Isolation of DNA from Stool and Bodily Fluids for PCR Amplication," BioTechniques, Vol. 20, No. 5, pp. 784-788.	
	C68	Park et al. (1999) "Gene-Environment Interaction in Hereditary Nonpolyposis Colorectal Cancer with Implications for Diagnosis and Genetic Testing," International Journal of Cancer 82: 516-519.	
·	C69	Payne et al. "Role of Apoptosis in Biology and Pathology: Resistance to Apoptosis in Colon Carcinogenes & Ultrastructural Pathology," Vol. 19, pp. 221-248, 1995.	
	C70	Ponz de Leon et al. (1998) "Frequency and Type of Colorectal Tumors in Asymptomatic High-Risk Individuals in Families with Hereditary Nonpolyposis Colorectal Cancer," Cancer Epidemiology, Biomarkers & Prevention 7: 639-641.	
	C71	Ponz de Leon et al. (1999) "Hereditary Colorectal Cancer in the General Population: From Cancer Registration to Molecular Diagnosis," Gut 45: 32-38.	
	C72	Pyatt et al. (1999) "Polymorphic Variation at the BAT-25 and BAT-26 Loci in Individuals of African Origin," American Journal of Pathology 155: 349-353.	
	C73	Rashid et al. (1999) "Genetic Epidemiology of Mutated K-ras Proto-Oncogene, Altered Suppressor Genes, and Microsatellite Instability in Colorectal Adenomas," Gut 44: 826-833.	
	C74	Ravelingien et al. (1995) "Contribution of Molecular Oncology in the Detection of Colorectal Carcinomas," Acta Gastro-Enterologica Belgica, Vol. 58, pp. 270-273.	
	C75	Ridanpaa et al. (1995) "Detection of Loss of Heterozygosity in the p53 Tumor Suppressor Gene Using a PCR-based Assay," Path. Res. Pract., Vol. 191, pp. 399-402.	
	C76	Salahshor et al. (1999) "Microsatellite Instability in Sporadic Colorectal Cancer is Not an Independent Prognostic Factor" British Journal of Cancer 81: 190-193.	
	C77	Samowitz et al. (1995) "Microsatellite Instability in Human Colonic Cancer Is Not a Useful Clinical Indicator of Familial Colorectal Cancer," Gastroenterology 109: 1765-1771.	
	C78	Samowitz et al. (1997) "Microsatellite Instability in Colorectal Adenomas," Gastroenterology 112: 1515-1519.	
	C79	Samowitz et al. (1999) "BAT-26 and BAT-40 Instability in Colorectal Adenomas and Carcinomas and Germline Polymorphisms," American Journal of Pathology 154: 1637-1641.	

Examiner Date	
Signature Considered	

Substitute for form 1449/PTO				Complete if Known		
				Application Number	10/601,132	
11	NFORMATION	I DI	SCLOSURE	Filing Date	June 20, 2003	
S	TATEMENT E	3Y /	APPLICANT	First Named Inventor	Anthony P. Shuber	
				Art Unit	1642	
	(Use as many sh	eets as	necessary)	Examiner Name	S. E. Aeder	
Sheet 11 of 11		Attorney Docket Number	EXT-055			

		NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. 1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
	C80	Shapiro et al. (June 1983) "Determination of Circulating DNA Levels in Patients with Benign or Malignant Gastrointestinal Disease," Cancer, Vol. 51, No. 11, pp. 2116-2120.			
	C81	Sidransky (1997) "Nucleic acid-based methods for the detection of cancer," Science, Vol. 278, No. 5340, pp. 1054-1057.			
	C82	Sidransky et al. (1992) "Identification of ras Oncogene Mutations in the Stool of Patients with Curable Colorectal Tumors," Science, Vol. 256, pp. 102-105.			
	C83	Skoletsky et al. (1998) "High frequency of detecting amplifiable DNA in stools of apparently normal individuals," Gastroenterology, Vol. 114, No. 4, p A681.			
	C84	Smith-Ravin et al. (1995) "Detection of c-Ki-ras Mutations in Fecal Samples from Sporadic Colorectal Cancer Patients," Gut, Vol. 36, pp. 81-86.			
	C85	Syngal et al. (1998) "Benefits of Colonoscopic Surveillance and Prophylactic Colectomy in Patients With Hereditary Nonpolyposis Colorectal Cancer Mutations," Annals of Internal Medicine 129: 787-796.			
	C86	Syngal et al. (1999) "Interpretation of Genetic Test Results for Hereditary Nonpolyposis Colorectal Cancer," JAMA 282: 247.			
	C87	Takeda et al. (1993) "Detection of K-ras Mutation in Sputum by Mutant-Allele-Specific Amplification (MASA)," Human Mutation, Vol. 2, pp. 112-117.			
	C88	Thibodeau et al. (1993) "Microsatellite Instability in Cancer of the Proximal Colon," Science, Vol. 260, pp. 816-819.			
	C89	Tsujitani et al. (1996) "Apoptotic Cell Death and Its Relationship to Carcinogenesis in Colorectal Carcinoma," Cancer Supplement, Vol. 77, No. 8, pp. 1711-1716.			
	C90	Vogelstein, et al. (1999) "Digital PCR," Proc. Natl. Acad. Sci. USA, Vol. 96, pp. 3543-3557.			
	C91	Zhou et al. (1997) "Allelic Profiles of Mononucleotide Repeat Microsatellites in Control Individuals and in Colorectal Tumors With and Without Replication Errors," Oncogene 15: 1713-1718.			
	C92	Zhou et al. (1998) "Determination of the Replication Error Phenotype in Human Tumors Without the Requirement for Matching Normal DNA by Analysis of Mononucleotide Repeat Microsatellites," Genes. Chromosomes & Cancer 21: 101-107.			

LIBC/3251029.1

Examiner	Date	
Signature	Considered	



Complete if Known Substitute for form 1449/PTO Application Number 10/601,132 INFORMATION DISCLOSURE June 20, 2003 Filing Date STATEMENT BY APPLICANT Anthony P. Shuber First Named Inventor 1642 Art Unit (Use as many sheets as necessary) Examiner Name S. E. Aeder EXT-055 Attorney Docket Number Sheet of 11

	U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
			11-08-2001	Lapidus	· · · · · · · · · · · · · · · · · · ·		
	A1* A2*	US-2001/039012 US-2001/018180		Shuber et al.			
	A3*	US-2007/018180	01-03-2002				
	A4*	US-2002/001800 US-2002/004201		Lapidus et al.			
	A5*	US-2002/004201	02-28-2002	Shuber			
	A6*	US-2002/045183	04-18-2002	Shuber et al.			
	A7*	US-2002/048752		Lapidus et al.			
	A8*	US-2002/064787		Shuber et al.			
	A9*	US-2002/110810	08-15-2002				
	A10*	US-2002/119469	08-29-2002				
	A11*	US-2002/119472	08-29-2002	Lapidus et al.			
	A12*	US-2002/123052	09-05-2002				
	A13*	US-2002/132251	09-19-2002	Shuber			
	A14*	US-2002/164631	11-07-2002				
	A15*	US-2003/044780		Lapidus et al.			
	A16*	US-2003/049659	03-13-2003	Lapidus et al.			
	A17*	US-2003/087258		Shuber			
		US-2004/043467		Shuber et al.			
		US-2005/260638	11-24-2005				
	+	US-2006/121495		Shuber			
	A21*		08-30-2007	Shuber			
		US-2007/0248546	10-25-2007	Shuber			
		US-3,413,464	11-26-1968				
	A24*	1	07-18-1978				
		US-4,309,782	01-12-1982				
	A26*		06-08-1982				
	A27*		11-09-1982 05-01-1984				
	A28*		08-13-1985				
	A29*		03-25-1986				
	A31*	US-4,578,358 US-4,705,050	11-10-1987	Markham			
	A32*		04-05-1988				
	A33*	US-4,786,718	11-22-1988	Weinberg et al.			
		US-4,857,300	08-15-1989				
	A35*	US-4,871,838	10-03-1989				
<u> </u>		US-4,935,342	06-19-1990				
		US-4,981,783	01-01-1991				
		US-4,982,615	01-08-1991	Sultan et al.			
		US-5,087,617	02-11-1992	Smith			
	A40*		06-30-1992	Livak et al.			
 .		US-5,137,806	08-11-1992	LeMaistre et al.			
	A42*		09-22-1992	Skiba et al.			
	A43*	·	03-23-1993	Guadagno et al.	·		

Examiner	Date	
Signature	Considered	

Complete if Known Substitute for form 1449/PTO 10/601,132 Application Number INFORMATION DISCLOSURE June 20, 2003 Filing Date STATEMENT BY APPLICANT Anthony P. Shuber First Named Inventor 1642 Art Unit (Use as many sheets as necessary) . S. E. Aeder Examiner Name EXT-055 2 of 11 Attorney Docket Number Sheet

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	A44*	US-5,200,314	04-06-1993	Urdea				
	A45*	US-5,248,671	09-28-1993	Smith				
	1	US-5,272,057	12-21-1993	Smulson et al.				
		US-5,302,509		Cheeseman				
	A48*	US-5,330,892	07-19-1994	Vogelstein et al.				
	A49*	US-5,331,973	07-26-1994	Fiedler et al.				
	<u> </u>	US-5,348,855	09-20-1994	Dattagupta et al.				
		US-5,352,775	10-04-1994	Albertsen et al.				
	A52*	US-5,362,623	11-08-1994	Vogelstein et al.				
	A53*	US-5,369,004		Polymeropoulos et al.				
		US-5,378,602	01-03-1995	Polymeropoulos et al.				
		US-5,380,645	01-10-1995	Vogelstein				
		US-5,380,647	01-10-1995	Bahar et al.				
		US-5,382,510	01-17-1995	Levine et al.				
		US-5,409,586	04-25-1995	Kamahori et al.				
		US-5,416,025	05-16-1995	Krepinsky et al.				
		US-5,458,761	10-17-1995	Kamahori et al.				
	A61*		11-07-1995	Carlson et al.				
	A62*	US-5,466,576	11-14-1995	Schulz et al.				
		US-5,468,610	11-21-1995	Polymeropoulos et al.				
		US-5,468,613	11-21-1995					
		US-5,482,834	01-09-1996	Gillespie				
		US-5,489,508	02-06-1996					
		US-5,492,808	02-20-1996	de la Chapelle et al.				
		US-5,496,470	03-05-1996	Lenhart				
		US-5,506,105	04-09-1996	Haydock				
_		US-5,508,164	04-16-1996	Kausch et al.				
		US-5,512,441	04-30-1996	Ronai				
		US-5,514,547	05-07-1996	Balazs et al.				
		US-5,527,676		Vogelstein et al.				
		US-5,532,108	07-02-1996		·			
		US-5,538,851	07-23-1996	Fach et al.				
 		US-5,559,014	09-24-1996	Estes et al.				
	A77*		12-03-1996					
		US-5,589,335	12-31-1996	+				
		US-5,599,662	02-04-1997	Respess				
		US-5.612.473	03-18-1997	Wu et al.				
		US-5,635,352	06-03-1997	Urdea et al.				
		US-5,641,628	06-24-1997	Bianchi				
		US-5,645,995	07-08-1997	Kieback				
		US-5,670,325	09-23-1997					

Examiner	Date	
Signature	Considered	

Complete if Known Substitute for form 1449/PTO 10/601,132 Application Number INFORMATION DISCLOSURE June 20, 2003 Filing Date STATEMENT BY APPLICANT Anthony P. Shuber First Named Inventor 1642 Art Unit (Use as many sheets as necessary) S. E. Aeder Examiner Name EXT-055 Attorney Docket Number 3 of 11 Sheet

			U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A85*	US-5,688,643		Oka et al.	· · · · · · · · · · · · · · · · · · ·
	A86*	US-5,709,998	01-20-1998	Kinzler et al.	
	A87*	US-5,710,028	01-20-1998	Eyal et al.	
	A88*	US-5,741,650		Lapidus et al.	
_	A89*	US-5,759,777		Kearney et al. ,	
	A90*	US-5,830,665	11-03-1998	Shuber et al.	
	A91*	US-5,846,710	12-08-1998	Bajaj	
	A92*	US-5,856,104	01-05-1999	Chee et al.	
	A93*	US-5,882,865	03-16-1999	Vogelstein et al.	
	A94*	US-5,888,778	03-30-1999		
	A95*	US-5,910,407	06-08-1999		•
	A96*	US-5,916,744	06-29-1999		
	A97*	US-5,928,870		Lapidus et al.	
	A98*	US-5,942,396	08-24-1999		
	A99*	US-5,952,178		Lapidus et al.	
		US-5,976,800	11-02-1999		
		US-6,020,137		Lapidus et al.	
		US-6,037,465		Hillebrand et al.	
		US-6,084,091	07-04-2000		
		US-6,100,029		Lapidus et al.	
		US-6,143,529		Lapidus et al.	
		US-6,146,828		Lapidus et al.	
		US-6,150,100		Ruschoff et al.	
		US-6,156,504	12-05-2000	Gocke et al.	
		US-6,177,251	01-23-2001	Vogelstein et al.	
		US-6,214,187	04-10-2001	Hammond et al.	
		US-6,214,558	04-10-2001	Shuber et al.	
		US-6,228,596	05-08-2001	Macina et al.	
		US-6,235,474	05-22-2001	Feinberg	
_		US-6,238,927	05-29-2001	Abrams et al.	
		US-6,251,660	06-26-2001	Muir et al.	
		US-6,268,136	07-31-2001	Shuber et al.	
		US-6,280,947	08-28-2001	Shuber et al.	
		US-6,300,077	10-09-2001		
		US-6,303,304	10-16-2001	Shuber et al:	
_		US-6,406,857	06-18-2002		
	A121*		08-06-2002		
		US-6,448,002		Hillebrand et al.	
		US-6,498,012	12-24-2002		
		US-6,503,718		Shuber et al.	
		US-6,551,777		Shuber et al.	

Examiner	Date
Signature	Considered

					Complete if Known	
Sub	stitute for form 1449/P	10		Application Number	10/601,132	•
IN	FORMATI	ON DISC	LOSURE	Filing Date	June 20, 2003	
	TATEMEN			First Named Inventor	Anthony P. Shuber	
J	IAILMEN			Art Unit	1642	
	(Use as man	y sheets as nec	essary)	Examiner Name	S. E. Aeder	
Sheet	4	of	11	Attorney Docket Number	EXT-055	

	U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	A126*	US-6,586,177	07-01-2003	Shuber				
	A127*	US-6,849,403	02-01-2005	Shuber				
	A128*	US-6,919,174	07-19-2005	Shuber				
	A129*	US-6,964,846	11-15-2005	Shuber				
	A130*	US-6,203,993 B1	03-20-2001	Shuber et al.				
	A131*	US-6,351,857 B2	03-05-2002	Slaon, III et al.				
	A132*		07-09-2002	Slaon, III et al.				
	A133*	US-6,428,964 B1	08-06-2002	Shuber				
	A134*		11-05-2002	Shuber et al.				
	A135*	US-6,482,595 B2	11-19-2002	Shuber et al.				

-	-	FOREI	GN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
	B1	AU-19942333	09-30-1999			
	B2	AU-A-11325/95	04-18-1996	Univ Johns Hopkins		
· · · · · · · · · · · · · · · · · · ·	В3	CA-2228769	02-27-1997	Max Planck Gesellschaft		
	B4	DE-19530132 C2	02-20-1997	Max Planck Gesellschaft		V
	B5	DE-19712332 A1	10-01-1998	Boehringer Mannheim Gmbh		1
	В6	DE-19736691 A	02-25-1999	Giesing Michael Prof Dr Med		1
	В7	EP-0270017 A2	06-08-1988	Molecular Biosystems Inc		
	В8	EP-0284362 A2	09-28-1988	Ici Plc		
	В9	EP-0337498	10-18-1989	Montefiore Med Center		
	B10	EP-0390323 A2	10-03-1990	Univ Johns Hopkins		
	B11	EP-0391565	10-10-1990	Helena Lab Corp		
	B12	EP-0407789 B1	01-16-1991	Canon Kk		
	B13	EP-0664339 A1	07-26-1995	Wakunaga Seiyaku Kk		
	B14	GB-2327497	01-27-1999	Zeneca Ltd.		
	B15	WO-00/09751	02-24-2000	Exact Lab Inc		
	B16	WO-00/11215	03-02-2000	Exact Lab Inc		<u> </u>
	B17	WO-00/31298-`	06-02-2000	Exact Lab Inc		L
	B18	WO-00/31303	06-02-2000	Exact Lab Inc		
	B19	WO-00/31305	06-02-2000	Exact Lab Inc		_
	B20	WO-00/32820	06-08-2000	Exact Lab Inc		_
	B21	WO-00/50640	08-31-2000	Exact Lab Inc		Ļ
	B22	WO-00/58514	10-05-2000	Exact Lab Inc	<u> </u>	<u> </u>
	B23	WO-00/60118	10-12-2000	Mosaic Technologies Inc et al.		

Examiner	Date	
Signature	Considered	

Complete if Known Substitute for form 1449/PTO 10/601,132 Application Number INFORMATION DISCLOSURE June 20, 2003 Filing Date STATEMENT BY APPLICANT Anthony P. Shuber First Named Inventor 1642 Art Unit (Use as many sheets as necessary) S. E. Aeder Examiner Name EXT-055 5 of 11 Attorney Docket Number Sheet

		FOR	EIGN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
	B24	WO-00/70096	11-23-2000	Exact Lab Inc		
	B25	WO-01/11083 A2	02-15-2001	Exact Lab Inc	<u> </u>	
	B26	WO-01/18252 A2	03-15-2001	Exact Lab Inc		
	B27	WO-01/42502 A2		Exact Lab Inc		
	B28	WO-01/42503 A2	06-14-2001	Exact Sciences Corp		
	B29	WO-01/42781 A2		Exact Sciences Corp et al.		
	B30	WO-01/64950 A2		Exact Sciences Corp		
	B31	WO-02/55740 A2		Exact Sciences Corp		
	B32	WO-02/74995		Exact Sciences Corp et al.		
	B33	WO/02/092858 A2		Exact Sciences Corp		
	B34	WO-03/71252 A2		Exact Sciences Corp		
	B35	WO-90/09455	08-23-1990			
	B36	WO-92/13103	08-06-1992			
	B37	WO-92/16657	10-01-1992			
	B38	WO-93/18186		Univ California		
	B39	WO-93/20233		Univ Maryland	*****	
	B40	WO-93/20235		Univ Johns Hopkins Med		
	B41	WO-94/00603		Univ Princeton et al.		
	B42	WO-94/01447	01-20-1994			
	B43	WO-94/10575		Rycus Avigail et al.		
l	B44	WO-94/11383		Cold Spring Harbor Lab		
	B45	WO-95/00669 A		Pharmacia Biotech Ab et al.		V
	B46	WO-95/07361	03-16-1995	Pasteur Institut et al.		П
	B47	WO-95/09928		Univ California		
	B48	WO-95/09929		Univ California		
<u> </u>	B49	WO-95/13397		Univ Johns Hopkins Med		
	B50	WO-95/15400	06-08-1995			
	B51	WO-95/16792		Stroun Maurice et al.		V
	B52	WO-95/18818	07-13-1995			
	B53	WO-95/19448	07-20-1995			
	B54	WO-95/25813		Univ Utah Res Found et al.		
	B55	WO-96/01907		Squibb Bristol Myers Co		
	B56	WO-96/06951	03-07-1996			
	B57	WO-96/08514	03-21-1996			T
·	B58	WO-97/07239	02-27-1997			V
	B59	WO-97/09600	03-13-1997	Medical Res Council et al.		广
-	B60	WO-97/19191 A	05-29-1997			_
	B61		07-03-1997	Exact Lab Inc		-
L	1001	WO-97/23651	101-03-1991	LAGULEAU IIIC	J	

Examiner	Date
Signature	

Complete if Known Substitute for form 1449/PTO 10/601,132 Application Number INFORMATION DISCLOSURE June 20, 2003 Filing Date STATEMENT BY APPLICANT Anthony P. Shuber First Named Inventor Art Unit 1642 (Use as many sheets as necessary) S. E. Aeder Examiner Name Attorney Docket Number EXT-055 11 of 6 Sheet

		FOR	EIGN PATENT	DOCUMENTS		,
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
	B62	WO-97/28450	08-07-1997	Exact Lab Inc		
	B63	WO-98/08971	03-05-1998	Invitek Gmbh et al.		1
	B64	WO-98/38338	09-03-1998	Exact Lab Inc		
	B65	WO-98/39478	09-11-1998	Exact Lab Inc		
	B66	WO-98/58081	12-23-1998	Exact Lab Inc		
	B67	WO-98/58084	12-23-1998	Exact Lab Inc		
	B68	WO-99/07894	02-18-1999	Wisconsin Alumni Res Found et al.		
	B69	WO-99/07895	02-18-1999	Ludwig Inst Cancer Res et al.		
	B70	WO-99/10528	03-04-1999	Giesing Michael et al.		1
	B71	WO-99/20798	04-29-1999	Exact Lab Inc		
	B72	WO-99/26724	06-03-1999	Mosaic Technologies et al.		
	B73	WO-99/28507	06-10-1999	Exact Lab Inc		
	B74	WO-99/53316	10-21-1999	Exact Lab Inc		
	B75	WO-99/55912	11-04-1999	Exact Lab Inc		<u> </u>
	B76	WO-99/66077	12-23-1999	Exact Lab Inc		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional).

*EXÁMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²			
	C1	Alquist et al. "Universal Detection of Aerodigestive Cancers by Assay of Nanopoptotic Human DNA in Stool," Presented at Digestive Disesase Week Annual Conference, San Diego, CA, May 2000.				
	C2	Aaltonen et al. (1994) "Replication Errors in Benign and Malignant Tumors from Hereditary Nonpolypopsis Colorectal Cancer Patients" Cancer Research 54: 1645-1648.				
	C3	Aaltonen et al. (1998) "Incidence of Hereditary Nonpolyposis Colorectal Cancer and the Feasibility of Molecular Screening for the Disease" The New England Journal of Medicine 338: 1481-1487.				

Examiner	Date
Signature	Considered

Applicant is to place a check mark here if English language Translation is attached.

Cub	INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Complete if Known		
300	stitute for form 144377 10			Application Number	10/601,132
11	NFORMATION	I DI	SCLOSURE	Filing Date	June 20, 2003
S	STATEMENT BY APPLICANT			First Named Inventor	Anthony P. Shuber
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,	Art Unit	1642
	(Use as many sh	eets as	necessary)	Examiner Name	S. E. Aeder
Sheet	7	of	11	Attorney Docket Number	EXT-055

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T?
	C4	Allen et al. (1997) "Morphological and biochemical characterization and analysis of apoptotis." J Pharm. & Toxicol. Methods, Vol. 37, No. 4, pp. 215-28.	
	C5	Ambrosini et al. "A navel anti-apoptosis gene, surviving, expressed in cancer and lymphoma" Nature Medicine, Vol. 3, No. 8, pp. 917-921, August 1997.	
	C6	Anker et al. (1999) "Detection of Circulating Tumour DNA in the Blood (plasma/serum) of Cancer Patients," Cancer and Metastasis Reviews, Vol. 18, pp.65-73.	
	C7	Arber et al. (1997) "A K-ras Oncogene Increases Resistance to Sulindac-Induced Apoptosis in Rat Enterocytes," Gastroenterology, Vol. 113, No. 6, pp. 1892-1900.	
	C8	Bernstein et al. "A Bile Acid-induced Apoptosis Assay for Colon-Cancer Risk and Associated Quality Control Studies," Cancer Research, Vol. 59, pp. 2353-2357, 1999.	
	C9	Bertario et al. (1999) "Risk of Colorectal Cancer Following Colonoscopic Polypectomy," Tumori 85: 157-162.	
	C10	Blum (1995) "Colorectal Cancer: Future Population Screening for Early Colorectal Cancer," European Journal of Cancer, Vol. 31A, pp. 1369-1372.	
	C11	Bohm et al. (1977) "Deletion Analysis at the DEL-27, APC and MTS1 Loci in Bladder Cancer: LOH at the DEL-27 Locus on 5p13-12 is a Prognostic Marker of Tumor Progression," Int. J. Cancer (Pred. Oncol.), 74:291-295.	
	C12	Bos et al. (May 28, 1987) "Prevalence of ras Gene Mutations in Human Colorectal Cancers," Nature, Vol. 327, pp. 293-297.	
	C13	Caldas et al. (1994) "Detection of K-ras Mutations in the Stool of Patients with Pancreatic Adenocarcinoma and Pancreatic Ductal Hyperplasia," Cancer Research, Vol. 54, pp. 3568-3573.	
	C14	Capozzi et al. (1999) "Evaluation of the Replication Error Phenotype in Relation to Molecular and Clinicopathological Features in Hereditary and Early Onset Colorectal Cancer," European Journal of Cancer 35: 289-295.	
	C15	Cave et al. (1994) "Reliability of PCR Directly from Stool Samples: Usefulness of an Internal Standard," BioTechniques, Vol. 16, No. 5, pp. 809-810.	
	C16	Cawkwell et al. (1994) "Frequency of allele loss of DCC, p53, RBI, WTI, NF1, NM23 and APC/MCC in colorectal cancer assayed by fluorescent multiplex polymerase chain reaction," B. J. Can., Vol. 70, pp. 813-818.	
	C17	Chapelle (1999) " Testing Tumors for Microsatellite Instability," European Journal of Human Genetics 7: 407-408.	
`	C18	Charlesworth et al. (1994) "The Evolutionary Dynamics of Repetitive DNA in Eukaryotes," Nature, Vol. 371, pp. 215-220.	
	C19	Chen et al. (1997) "Microsatellite Instability in Sporadic-Colon-Cancer Patients With and Without Liver Metastases" International Journal of Cancer 74: 470-474.	
	C20	Chen et al. (1996), "Detection of Single-Base Mutations by a Competitive Mobility Shift Assay," Analytical Biochemistry, CIS, Academic, Press, Vol. 239, No. 1, pp. 61-69.	
	C21	Coll et al. (1989) "Evaluation of a Rapid Method of Extracting DNA from Stool Samples for Use in Hybridization Assays," Journal of Clinical Microbiology, Vol. 27, No. 10, pp. 2245-2248.	
-	C22	Coombs et al. (1996) "A Rapid, Simple, and User-Friendly Method for DNA Extraction from Clinical Stool Samples," ASM 1996 General Meeting, New Orleans, LA.	

Examiner	Date
Signature	Considered

6.5	stitute for form 1449/PT	-0			Complete if Known	
500	stitute for form 1449/F1	O		Application Number	10/601,132	
IN	FORMATION	ON DIS	CLOSURE	Filing Date	June 20, 2003	
	STATEMENT BY APPLICANT		First Named Inventor	Anthony P. Shuber		
	17(12)			Art Unit	1642	
	(Use as many	sheets as n	ecessary)	Examiner Name	S. E. Aeder	
Sheet	8	of	11	Attorney Docket Number	EXT-055	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	C23	Coughlin et al. (1999) "Public Health Perspectives on Testing for Colorectal Cancer Susceptibility Genes" American Journal of Preventive Medicine 16: 99-104.	
	C24 .	Croitoru et al. "Reduce, Reuse, and Recycle: Shedding Light on Shedding Cells," Gastroenterology, Vol. 105, pp. 1243-1246, October 1993.	.,
	C25	Cunningham C. and M.G. Dunlop, (1996) "Molecular Genetic Basis of Colorectal Cancer Susceptibility," British Journal of Surgery, Vol. 83, pp. 321-329.	
	C26	Deng et al. (1996) "Loss of Heterozygosity in Normal Tissue Adjacent to Breast Carcinomas," Science, Vol. 274, pp. 2057-2059.	
	C27	Dennin (1979) "DNA of Free and Complexed Origin in Human Plasma: Concentration and Length Distribution," Klin. Wochenschr. Vol. 57, pp. 451-456.	
	C28	Depraetere "Eat me- Signals of apoptotic bodies," Nature Cell Biology, Vol. 2, pg. E 104, June 2000.	
	C29	Deuter et al. (1995) "A Method for Preparation of Fecal DNA Suitable for PCR," Nucleic Acids Research, Vol. 23, No. 18, pp. 3800-3801.	
	C30	Dib et al. (1996) "A Comprehensive Genetic Map of the Human Genome Based on 5,264 Microsatellites." Nature Vol. 380, pp. 152-154.	
	C31	Duffy (1995) "Can Molecular Markers Now be Used for Early Diagnosis of Malignancy?" Clin. Chem. Vol. 41, No. 10, pp. 1410-1413.	
	C32	Eads et al. (1999) "CpG island hypermethylation in human colorectal tumors is not associated with DNA methyltransferase overexpression." Cancer Research, Vol. 59, No. 10, pp. 2301-2306.	
	C33	Eguchi et al. (1996) "Mutations of the p53 Gene in the Stool of Patients with Resectable Colorectal Cancer," Cancer Supplement, Vol. 77, No. 8, pp. 1707-1710.	
	C34	Emlen et al. (1984) "Effect of DNA Size and Strandedness on the <i>in vivo</i> Clearance and Organ Localization of DNA," Clin. Exp. Immunol., Vol. 56, pp. 185-192.	
	C35	Fearon (1995) "Molecular Abnormalities in Colon and Rectal Cancer," The Molecular Basis of Cancer, pp. 340-357.	
	C36	Finkel (1999) "Does Cancer Therapy Trigger Cell Suicide?," Science, Vol. 286, pp.2256-2258.	
	C37	Garewal et al. (1996) "Reduced Bile Acid-induced Apoptosis in "Normal," Colorectal Mucosa: A Potential Biological Marker for Cancer Risk" Cancer Research, Vol. 56, pp. 1480-1483.	
	C38	Giacona et al. (1998) "Cell-Free DNA in Human Blood Plasma: Length Measurements in Patients with Pancreatic Cancer and Healthy Controls," Pancreas, Vol. 17, No. 1, pp. 89-97.	
	C39	Grossman et al. (1988), "Colonoscopic Screening of persons With Suspected Risk Factors for Colon Cancer," Gastroenterology 94: 395-400.	
	C40	Gyllensten et al. (1995) "Sequencing of In Vitro Amplified DNA," Recombinant DNA Methodology II, (Wu, ed.), pp. 565-578.	
	C41	Hall et al. "Regulation of cell number in the mammalian gastrointestinal tract: the importance of apoptosis," Journal of Cell Science, Vol. 107, pp. 3569-3577, 1994.	
	C42	Hasegawa et al. (1995) "Detection of K-ras Mutations in DNAs Isolated From Feces of Patients with Colorectal Tumors by Mutant-Allele-Specific Amplification (MASA)," Oncogene, Vol. 10, pp. 1441-1445.	

Examiner	Date
Signature	Considered

٥٠	NFORMATION DISCLOSURE TATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known		
500	istitute for form (masir i	O		Application Number	10/601,132
IN	FORMATION	ON DIS	CLOSURE	Filing Date	June 20, 2003
••				First Named Inventor	Anthony P. Shuber
	, A LINE IV			Art Unit	1642
	(Use as many	sheets as i	necessary)	Examiner Name	S. E. Aeder
Sheet	9	of	11	Attorney Docket Number	EXT-055

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	C43	Hetts "To Die or Not to Die, An Overview of Apoptosis and Its Role in Disease," JAMA, Vol. 279, No. 4, pp. 300-307, January 28, 1998.	
	C44	Hibi et al. (1998) "Molecular Detection of Genetic Alterations in the Serum of Colorectal Cancer Patients," Cancer Research, Vol. 58, pp. 1405-1407.	
	C45	Hickman et al. (1994), "Apoptosis and cancer chemotherapy," Phil. Trans. R. Soc. Lond., 345:319-325.	
	C46	Hoang et al. (1997) "BAT-26, an Indicator of the Replication Error Phenotype in Colorectal Cancers and Cell Lines" Cancer Research 57: 300-303.	
	C47	Honchel et al. (1995) "Genomic Instability in Neoplasia," Seminars in Cell Biology, Vol. 6, pp. 45-52.	
	C48	lino et al. (1999) "DNA Microsatellite Instability in Hyperplastic Polyps, Serrated Adenomas, and Mixed Polyps: a Mild Mutator Pathway for Colorectal Cancer?" Journal of Clinical Pathology 52: 5-9.	
	C49	Iniesta et al. (1998) "Genetic Abnormalities and Microsatellite Instability in Colorectal Cancer," Cancer Detection and Prevention 22: 383-395.	
	C50	Ishimaru et al. (1995) "Microsatellite Instability in Primary and Metastatic Colorectal Cancers," International Journal of Cancer 64: 153-157.	
	C51	Jarvinen et al. (1995) "Screening Reduces Colorectal Cancer Rate in Families With Hereditary Nonpolyposis Colorectal Cancer," Gastroenterology 108: 1405-1411.	
	C52	Jernvall et al. (1999) "Microsatellite Instability: Impact on Cancer Progression in Proximal and Distal Colorectal Cancers," European Journal of Cancer 35: 197-201.	
	C53	Jessup et al. (1992) "The Biology of Colorectal Carcinoma," Current Problems in Cancer pp. 263-328.	
	C54	Kawakami et al. (2000) "Hypermethylated APC DNA in Plasma and Prognosis of Patients with Colorectal Carcinoma," Int. J. Cancer (Pred. Oncol.) 84:404-409.	
	C55	Kawasaki et al. (1998) "Inhibition of Apoptosis by Surviving Predicts Shorter Survival Rates in Colorectal Cancer," Cancer Research, Vol. 58, pp. 5071-5074.	
	C56	Kim et al. (1998) "Microsatellite Instability in Young Patients With Colorectal Cancer," Pathology International 48: 586-594.	
	C57	Ko et al. (1999) "Genomic Instabillity and Alterations in Apc, Mcc and Dcc in Hong Kong Patients with Colorectal Carcinoma," Int. J. Cancer (Pred. Oncol.), 84:404-409.	
	C58	Konishi et al. (1996) "Molecular Nature of Colon Tumors in Hereditary Nonpolyposis Colon Cancer, Familial Polyposis, and Sporadic Colon Cancer," Gastroenterology 1 11: 307-317.	
	C59	Lamberti et al. (1999) "Microsatellite Instability - a Useful Diagnostic Tool to Select Patients at High Risk for Hereditary Non-Polyposis Colorectal Cancer: A Study in Different Groups of Patients With Colorectal Cancer," Gut 44: 839-843.	
	C60	Lengauer et al. (1998) "Genetic Instabilities in Human Cancers," Nature, Vol. 396, pp. 643-649.	
	C61	Leon et al. (1977) "Free DNA in the Serum of Cancer Patients and the Effect of Therapy," Cancer Research, Vol. 37, pp. 646-650.	

Examiner	Date	
Signature	Considered	

Sui	Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known			
300	75thate for form 1440/11	·		Application Number	10/601,132	
11	NFORMATIC	ON DISC	CLOSURE	Filing Date	June 20, 2003	
S	STATEMENT BY APPLICANT			First Named Inventor	Anthony P. Shuber	
				Art Unit	1642	
	(Use as many	sheets as ne	cessary)	Examiner Name	S. E. Aeder	
Sheet	10	of	11	Attorney Docket Number	EXT-055	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C62	Lipkin "Biomarkers of Increased Susceptibility to Gastrointestinal Cancer: New Application to Studies of Cancer Prevention in Human Subjects," Cancer Research, Vol. 48, pp. 235-245, January 15, 1998.	
	C63	Lleonart et al. (1998) "Microsatellite Instability and p53 Mutations in Sporadic Right and Left Colon Carcinoma" American Cancer Society 83: 889-895.	
	C64	Loktionov et al. (1995) "Early Detection of Cancer-Associated Gene Alterations in DNA Isolated from Rat Feces During Intestinal Tumor Induction with 1,2-Dimethylhydrazine," International Journal of Oncology, Vol. 6, pp. 437-445.	
	C65	Mulcachy et al. (February 1998) "A Prospective Study of K-ras Mutations in the Plasma of Pancreatic Cancer Patients," Clinical Cancer Research Vol. 4, pp. 271-275.	
	C66	Nollau et al. (1996) "Detection of K-ras Mutations in Stools of Patients with Colorectal Cancer by Mutant-Enriched PCR," Int. J. Cancer, Vol. 66 pp. 332-336.	
	C67	Nollau et al. (May 1996) "Isolation of DNA from Stool and Bodily Fluids for PCR Amplication," BioTechniques, Vol. 20, No. 5, pp. 784-788.	
	C68	Park et al. (1999) "Gene-Environment Interaction in Hereditary Nonpolyposis Colorectal Cancer with Implications for Diagnosis and Genetic Testing," International Journal of Cancer 82: 516-519.	
	C69	Payne et al. "Role of Apoptosis in Biology and Pathology: Resistance to Apoptosis in Colon Carcinogenes & Ultrastructural Pathology," Vol. 19, pp. 221-248, 1995.	
	C70	Ponz de Leon et al. (1998) "Frequency and Type of Colorectal Tumors in Asymptomatic High-Risk Individuals in Families with Hereditary, Nonpolyposis Colorectal Cancer," Cancer Epidemiology, Biomarkers & Prevention 7: 639-641.	
	C71	Ponz de Leon et al. (1999) "Hereditary Colorectal Cancer in the General Population: From Cancer Registration to Molecular Diagnosis," Gut 45: 32-38.	
	C72	Pyatt et al. (1999) "Polymorphic Variation at the BAT-25 and BAT-26 Loci in Individuals of African Origin," American Journal of Pathology 155: 349-353.	
	C73	Rashid et al. (1999) "Genetic Epidemiology of Mutated K-ras Proto-Oncogene, Altered Suppressor Genes, and Microsatellite Instability in Colorectal Adenomas," Gut 44: 826-833.	
	C74	Ravelingien et al. (1995) "Contribution of Molecular Oncology in the Detection of Colorectal Carcinomas," Acta Gastro-Enterologica Belgica, Vol. 58, pp. 270-273.	
	C75	Ridanpaa et al. (1995) "Detection of Loss of Heterozygosity in the p53 Tumor Suppressor Gene Using a PCR-based Assay," Path. Res. Pract., Vol. 191, pp. 399-402.	
_	C76	Salahshor et al. (1999) "Microsatellite Instability in Sporadic Colorectal Cancer is Not an Independent Prognostic Factor" British Journal of Cancer 81: 190-193.	
	C77	Samowitz et al. (1995) "Microsatellite Instability in Human Colonic Cancer Is Not a Useful Clinical Indicator of Familial Colorectal Cancer," Gastroenterology 109: 1765-1771.	
	C78	Samowitz et al. (1997) "Microsatellite Instability in Colorectal Adenomas," Gastroenterology 112: 1515-1519.	
	C79	Samowitz et al. (1999) "BAT-26 and BAT-40 Instability in Colorectal Adenomas and Carcinomas and Germline Polymorphisms," American Journal of Pathology 154: 1637-1641.	

Examiner	Date
Signature	Considered

C hather for form 1440/DTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/601,132
				Filing Date	June 20, 2003
				First Named Inventor	Anthony P. Shuber
				Art Unit	1642
	(Use as many	sheets as	necessary)	Examiner Name	S. E. Aeder
Sheet	11	of	11	Attorney Docket Number	EXT-055

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	C80	Shapiro et al. (June 1983) "Determination of Circulating DNA Levels in Patients with Benign or Malignant Gastrointestinal Disease," Cancer, Vol. 51, No. 11, pp. 2116-2120.	
, , , ,	C81	Sidransky (1997) "Nucleic acid-based methods for the detection of cancer," Science, Vol. 278, No. 5340, pp. 1054-1057.	
	C82	Sidransky et al. (1992) "Identification of ras Oncogene Mutations in the Stool of Patients with Curable Colorectal Tumors," Science, Vol. 256, pp. 102-105.	
	C83	Skoletsky et al. (1998) "High frequency of detecting amplifiable DNA in stools of apparently normal individuals," Gastroenterology, Vol. 114, No. 4, p A681.	
	C84	Smith-Ravin et al. (1995) "Detection of c-Ki-ras Mutations in Fecal Samples from Sporadic Colorectal Cancer Patients," Gut, Vol. 36, pp. 81-86.	
	C85	Syngal et al. (1998) "Benefits of Colonoscopic Surveillance and Prophylactic Colectomy in Patients With Hereditary Nonpolyposis Colorectal Cancer Mutations," Annals of Internal Medicine 129: 787-796.	
	C86	Syngal et al. (1999) "Interpretation of Genetic Test Results for Hereditary Nonpolyposis Colorectal Cancer," JAMA 282: 247.	
	C87	Takeda et al. (1993) "Detection of K-ras Mutation in Sputum by Mutant-Allele-Specific Amplification (MASA)," Human Mutation, Vol. 2, pp. 112-117.	
	C88	Thibodeau et al. (1993) "Microsatellite Instability in Cancer of the Proximal Colon," Science, Vol. 260, pp. 816-819.	
	C89	Tsujitani et al. (1996) "Apoptotic Cell Death and Its Relationship to Carcinogenesis in Colorectal Carcinoma," Cancer Supplement, Vol. 77, No. 8, pp. 1711-1716.	
	C90	Vogelstein, et al. (1999) "Digital PCR," Proc. Natl. Acad. Sci. USA, Vol. 96, pp. 3543-3557.	
	C91	Zhou et al. (1997) "Allelic Profiles of Mononucleotide Repeat Microsatellites in Control Individuals and in Colorectal Tumors With and Without Replication Errors," Oncogene 15: 1713-1718.	
	C92	Zhou et al. (1998) "Determination of the Replication Error Phenotype in Human Tumors Without the Requirement for Matching Normal DNA by Analysis of Mononucleotide Repeat Microsatellites," Genes. Chromosomes & Cancer 21: 101-107.	

LIBC.3251029.1

Examiner	Date
Signature	Considered
Signature	